EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 62016204
PUBLICATION DATE : 24-01-87

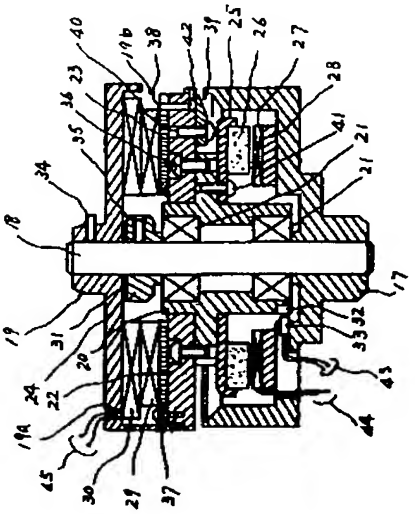
APPLICATION DATE : 15-07-85
APPLICATION NUMBER : 60154015

APPLICANT : HITACHI LTD;

INVENTOR : KAZAMA SABURO;

INT.CL. : G11B 5/02 G11B 5/52 G11B 15/61

TITLE : ROTATING DRUM FOR MAGNETIC RECORDING AND REPRODUCING DEVICE



ABSTRACT : PURPOSE: To improve the efficiency of the replacing work of the rotating drum by attaching or detaching the rotating drum part provided with the head and the rotary transformer part with the shaft fixing type rotating drum of the magnetic recording device.

CONSTITUTION: The rotating drum part and the rotary transformer part are constituted so that they can be attached or detached. Consequently, at the time of the replacing work of the head, first, a disk 20 to mount an intermediate rotating drum 22, etc., is fitted to a fixed shaft 18, and while the pre-load is applied by pre-load fittings 24 to regulate the upper and lower directions, by a screw 35 for fixing the pre-load fittings, the disk is fixed to the fixed shaft 18. Next, to secure the clearance between a stator part 30 and a rotor part 29 of the rotary transformer to the prescribed value, a spacer 31 for adjusting the height is inserted between an upper fixed drum 19 and the pre-load fittings 24. Thereafter, the spacer is fixed to the fixed shaft 18 by a screw 34 for fixing an upper fixed drum. In such a way, the assembling characteristic and the accuracy can be improved.

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PUBLICATION NUMBER : 61236014
PUBLICATION DATE : 21-10-86

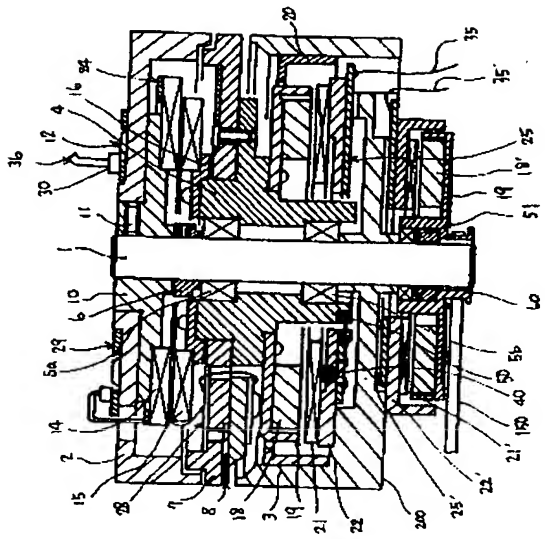
APPLICATION DATE : 12-04-85
APPLICATION NUMBER : 60076439

APPLICANT : HITACHI LTD;

INVENTOR : KAZAMA SABURO;

INT.CL. : G11B 5/52

TITLE : ROTARY HEAD DEVICE



ABSTRACT : PURPOSE: To make the device small, light and compact by incorporating a DD motor for driving video head in upper position than the bottom face of a lower side drum, and further providing the second motor that makes independent rotation and driving coaxially with the DD motor.

CONSTITUTION: A center shaft 1 is fixed to the center of bottom face of a lower side drum 3 by so-called fixed shaft type center drum rotation structure that fixed the center shaft and rotates the second drum provided in the lower part of an upper side drum. A rotatory part including a drum 7 carrying a video head 8 is totted by the first flat driving motor incorporated in a lower side drum 3. The second motor is, similar to the first motor, a flat motor, and provided concentrically around the center shaft 1 placed on the lower face of the bottom of the lower side drum 3 and projected to the lower face side. The upper drum 2 is fixed indirectly to the uppermost end of the center shaft 1 through a fixing disk 10. The drum 7 carrying the video head is fixed concentrically with a rotary body 4, and the rotary body 4 is coupled to the center shaft 1 to allow free rotation. Thus, a VTR set of small, light and compact structure can be realized.

Patent Abstracts of Japan

PUBLICATION NUMBER : 61104418
PUBLICATION DATE : 22-05-86

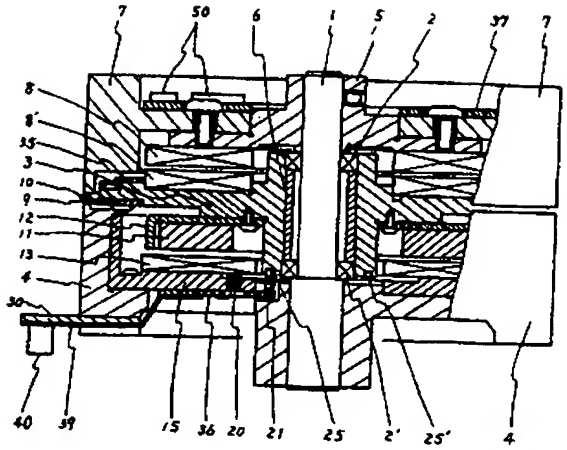
APPLICATION DATE : 26-10-84
APPLICATION NUMBER : 59223949

APPLICANT : HITACHI LTD;

INVENTOR : MASUDA NORIAKI;

INT.CL. : G11B 5/52

TITLE : ROTARY HEAD DEVICE



ABSTRACT : PURPOSE: To reduce the levels of vibrations, noises, jitters and wow-and-flutters respectively to attain high performance of a rotary head device, by fixing a rotary side yoke of a rotary transformer as well as a rotor of a drive motor to a rotary structure part at a place more inside than a video head attachment part and incorporating a rotary structure together with the rotary transformer and the drive motor.

CONSTITUTION: The lower end part of a shaft 1 is fixed to the bottom center part of a lower drum 4 with pressure, etc. together with a disk 5 fixed to the upper end of the shaft 1. While a rotary structure base material 3 is supported rotatably at the middle part between upper and lower parts of the shaft 1 via bearing parts 2 and 2'. A housing of bearings 2 and 2' is formed at the center part of the material 3, and a video head 10 is fixed at the most outer circumferencial part of a flat part around the housing via a head base 9. A rotary part consisting of a motor rotor, the material 3, a rotary transformer 8', etc. is totally incorporated to a half-closed space formed between the upper and lower drums 7 and 4. Then only the tip of the head 10 is exposed outside through a narrow gap between both drums and has a contact with a tape. Thus the noises produced at the inside and the outer surface of the rotary part are masked since the rotary part is semi-closed by a static structure formed with both drums 4 and 7.

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PUBLICATION NUMBER : 61160801
PUBLICATION DATE : 21-07-86

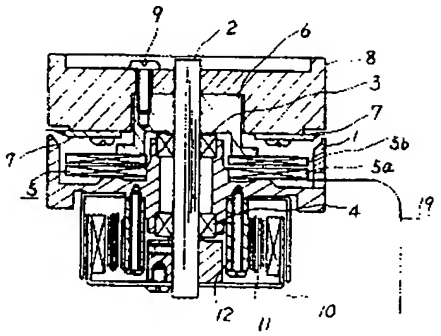
APPLICATION DATE : 10-01-85
APPLICATION NUMBER : 60001470

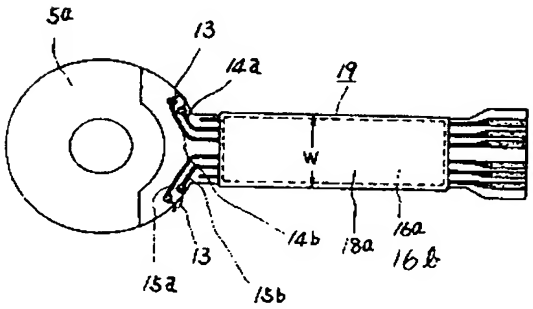
APPLICANT : HITACHI VIDEO ENG CO LTD;

INVENTOR : FUJIYAMA TEISHO;

INT.CL. : G11B 5/02 G11B 5/52

TITLE : ROTARY MAGNETIC RECORDING AND REPRODUCING DEVICE





ABSTRACT : PURPOSE: To suppress the generation of noises by securing a lamination structure a signal pattern is enclosed by a shielding pattern for a flexible print wire board.

CONSTITUTION: A rotary drum 8 containing plural video heads 7 is provided together with a fixed drum 1 containing a tape guide and a rotary transformer 5 containing transformers 5a and 5b at the fixed side and the rotary sides respectively. A flexible print wire board 19 is led out to the outside of the drum 1 from the transformer 5a. The board 19 has a lamination structure where signal patterns 14a, 14b, 15a and 15b are enclosed by shielding patterns 16a and 16b. An end of those signal patterns is connected to an enamel wire 13 of the transformer 5a with the end at the other side connected to a preamplifier. Thus the external noises are cut off by the patterns 16a and 16b. This reduces greatly the mixture of noises into the signal patterns.

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